

# Landscapes by Extraction: Contemporary Approaches to the Roman City of Tiermes, Spain

---

CARLOS RODRÍGUEZ FERNÁNDEZ | SAGRARIO FERNÁNDEZ RAGA

University of Valladolid, Spain

geological landscape | Roman city | rock-cut architecture |  
archaeology | Michael Heizer

The landscape of Tiermes is discovered to the eyes of a viewer as a seductive artificial topography, with large sandstone rock walls difficult to understand. Apparently the whole hill seems to be the result of geology and erosive action, but an intelligent regard discovers geometric traces, cuts and excavations, which are the real remains of a Roman city built directly on the rock and that make up a real anthropic landscape. Future challenges of landscape performance call for a contemporary reading of Tiermes, as a place in which scientific archaeology and urban studies coexist on the one hand, but also to keep alive in the viewer the aesthetic seduction that produces the *negative architecture* on the rock. This reflection on the excavated landscape is done in parallel with some works by American artist Michael Heizer as *Double Negative* or *Vertical Displacement*, with excavations that play with the perception of empty space and cycles of matter which develop the idea of landscapes by extraction. (Treib 1987)

## Tiermes: The Rocky Landscape

The Roman city of Tiermes is settled powerfully on a red sandstone rock hill at 1200 m. high, characterized by its geologic terraces and huge rock cuts, in the middle of a flood plain surrounded by high mountains, in a truly stunning scenery. Large infrastructure of the ancient city transformed the topography of the rock as cuts or trenches for gates, streets, buildings and particularly a network of aqueducts over 1 km. long, straight lines carved into the surface of the rock, which have befallen the time, and today are presented as cryptic but fascinating elements. Although the landscape in a first approximation apparently seems to be the result of geological and erosive forces, a deep study of geometric footprints indicates human presence and Tiermes became a real anthropic landscape.

The interventions carried out since 2007 by LABPAP UVa Research Group, recover geometry and architectural value of some of the great buildings of the city such as the Roman Forum and the *Domus of Aqueduct* (Arribas 2013), which reinforce the traces of the Roman city and its link with the landscape. Since then, research is oriented towards the south side of the hill of Tiermes, whose topography has historically characterized the place. Its difficult attribution to geology or human construction, leaves the viewer in an inevitable seduction of the unknown and even the sublime. In this context in which both geology and archaeology model the artificial topography of the rock, the contemporary landscape interventions are difficult, and must take up the challenge to preserve the balance between scientific knowledge, and being able to explain the archaeological remains of the ancient city, while they preserve and even enhance the plastic value of the landscape in ruins. (Figure 1)



FIGURE 1. Rocky landscape of the south face of Tiermes, result of anthropic actions (above). Excavated architecture of Tiermes into the surrounding landscape (below left). *Displaced / Replaced Mass*, Desert of Nevada, Michael Heizer, 1969. Reading archeology and landscape by extraction, positive topography and empty space (below right)

### Michael Heizer: Archaeology, Landscape and Void

The paradigm shift that involves incorporating this contemporary artistic vision to intervention in archaeological landscapes, implicate a change of reference in the viewer. This paper is oriented in this direction, from the inside of these cavities and excavated stays to the outside surrounding landscape. Tiermes is not going to be understood in a traditional way, but for its excavated complementary landscape. This reflection on the void has been among the main topics of sculpture and architecture over time and acquires an experimental dimension with American land artists in the second half of the 20th century. Among them, the work of Michael Heizer, heavily influenced by the work of his father the famous archaeologist Robert Heizer, who accompanied Michael on his archaeological expeditions in Mexico and Egypt, which then influence his sculptures in negative in the desert landscape of Nevada, like *Displaced/Replaced Mass* (1969). They are perfect geometric excavations in the desert surface as archaeological pits, trying to discover the remains enclosing the interior of the earth, while giving value to the surrounding space. These gaps that disrupt the smooth surface of the desert are a reflection of human action that builds in the same way the living space in the city of Tiermes.

### Landscapes by Extraction: Games with Perception

The work *Double Negative* (1969), a double cut 15 m. depth at two ends of a ravine of Mormon Mesa (Nevada, USA), has clear parallels with the aqueduct of Tiermes. Only through our perception and applying the laws of Gestalt, continuity of both parties is established, involving the intermediate empty space, where the absence of the rock creates its vitality (Treib 1987; 15). The work thus acquires a double condition of scale: the point of view of the visitor who enters the large hollow and comprises

the continuity by similarity of two facing cavities, on the one hand. But also the idea which offers a remote aerial view, in which the operation is perceived as a linear cut, as if it had been the product of a surgeon cutting the flat surface of the mesa. Clean cutting in relation to the steep topography further strengthens the scientific nature of what the author would call *Negative Architecture* (Celant 1997; 27).

In the aqueduct of Tiermes we find a similar topographic situation, with an excavated canal that runs along the ridge at a substantially constant height, measured perfectly by the technology of Roman water level and taking full advantage of the resources offered by the construction in a terraced topography: runs along a stretch excavated on the surface and reappears again to be introduced tangentially into the interior of the mountain, where a completely underground section begins. Trying to explain the continuity of the aqueduct for a contemporary viewer, we turn to strategies by using existing remnants known, just introducing a few new elements. The visitor path is conducted through the channel of the aqueduct itself that in certain moments is interrupted becoming a natural window, a real "machine vision" (Alvarez 2015) to experience landscape. In order to complete this perceptive strategy, in the plain surrounding the hill there are some isolated milestones introduced, which are visible from both ends as visual connections. In a similar way to that used by Heizer in *Double Negative*, where the earth from the excavation of two trenches is deposited continuing ground level, stressing the interspace void, it can recover the lost lower level of the aqueduct at both ends, which tense the continuity perception. (Figure 2)



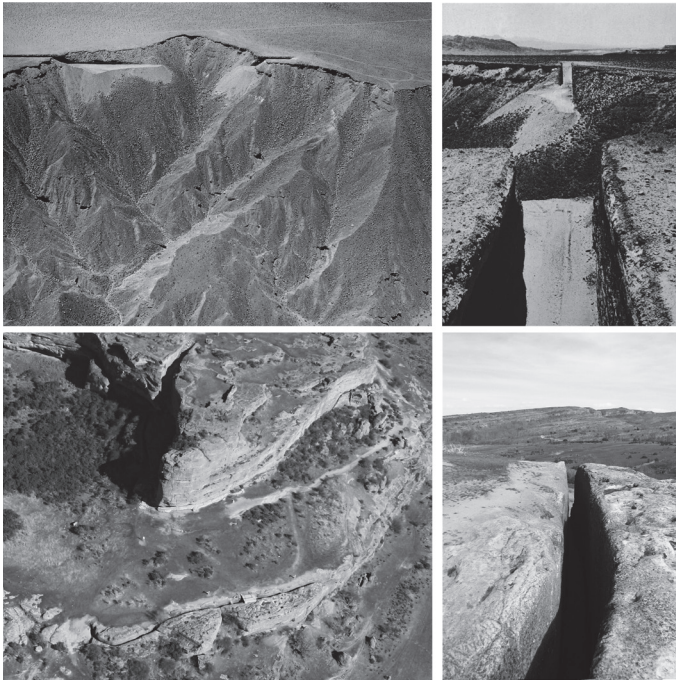


FIGURE 2. Double Negative, Mormon Mesa, Nevada USA, Michael Heizer, 1967-1970 (above) and south trench of Tiermes aqueduct (below). Carved lines that play with the topography and the perception of the viewer.

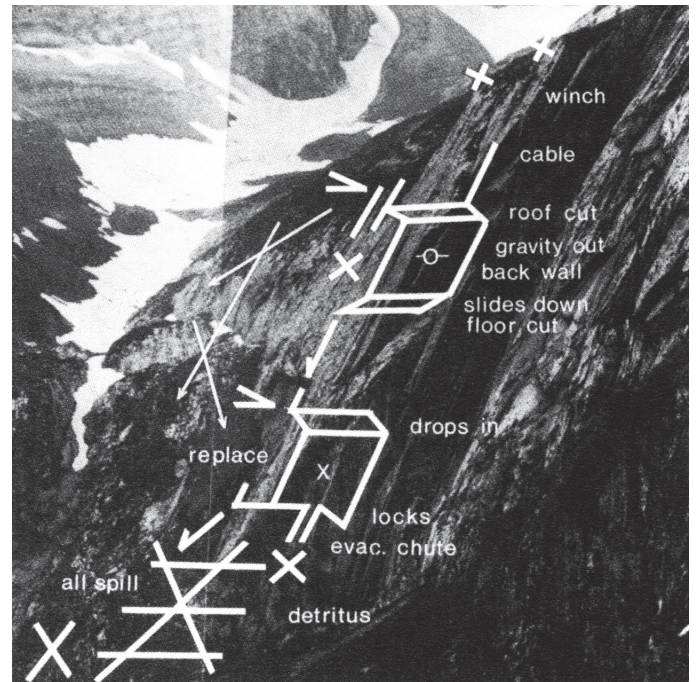


FIGURE 3. Vertical displacement, Michael Heizer: Appenzell, Switzerland, 1970. Working diagrams with rock.

### Landscapes of Action: Matter and Time Diagrams

The process of material landscape construction of Tiermes over time comprises a series of actions on the topography of the rock, the hand of man and nature, which in a continuous sequence of extractions, translations and transformations, give as a product new artificial topographies. The landscape is the result of a variation of matter in time, the processes of construction and destruction of the architecture that became archaeology when it was abandoned and whose evidence always remains in the landscape. This reflection is powered by a series of proposals Heizer performed following *Double Negative*, less known and that he grouped under the name of *Vertical Displacement* (1970-1971). The work surface goes from horizontal to vertical, chosen by the artist among a number of sites in the Appenzell mountains in the Alps and the Mount Haggin in Montana, proposing the construction of three vertical sculptures built directly on large natural rock cuts, which reach dimensions of up to 300 m. high, as is the case of the Messmer ravine (Switzerland). (Figure 3)

The methodology proposed by Heizer is based on photographic surveys of vertical geological sections chosen with a suggestive morphology for an artistic creation and on which directly draws diagrams showing the process of working with matter, the forces acting on it and produced movements: "The rock is mechanically cut as a block and is suspended from tensioned cables, slipping several hundred feet down the face of the mountain. Mechanically, the work is directly dependent on gravity as the means to move materials. During this sliding, small pieces of rock would be broken out, which would fall away to the base, accumulate and become structure again" (Brown 1984: 22-23). In this downline concatenate process it seems like Heizer plan the extraction of a fictitious quarry and

transport of stone by gravity, reproducing what would happen in the Egyptian and Mexican buildings he admired, and of course also the construction of the Roman city of Tiermes. At the same time it also reflect an erosion process accelerated by slipping on the rock, similar to that caused by ice in the glacier valley of Appenzell. The power of construction lies in the chosen site itself and through these experiments it is explained the construction technology of man. Both place and man technology, are the two main elements that characterize the landscape of Tiermes, where the unique arrangement of rock platforms and geological cuts put on the service of the Roman buildings, in a balance between adaptation and topographic transformation. In one hand it has taken the advantage of the good views and of the south privileged orientation, and on the other hand, it has valued the economy and technological capacity that always involves digging action.





FIGURE 4. Proposals studies for landscape intervention on the southern front of Tiermes: plant, diagrams excavation-transport-construction-erosion and elevation.

### Conclusion: Tiermes, a Landscape in Time

Recent research and landscape proposals in Tiermes are working with this experimental method, a method capable of understanding the current landscape as a process over time. Time that is materialized as a cycle drawn directly on the plan Tiermes identifying the stone quarry, transportation line and architectural construction in a first Roman occupation, but also the process of abandonment, archaeology and aggressive erosion afflicting the archaeological site, which produces equally the beauty and the fragility of conservation. These new proposals track and suggest these flows of matter, which are their own roads and urban infrastructure of the Roman city. Thus, these lines are integrated into the path system, leading the viewer to specific locations where perceptive resources are enhanced and studied, such as city gates or privileged places with archaeological remains of streets and buildings silhouetted against the landscape. In short, these lines of extraction are those that from now plan Tiermes landscape together with the landscape that is around, lines that guide the eye and suggest a future that gives continuity to Tiermes as a landscape over time. (Figure 4)

### Acknowledgements

The research for this paper was supported by R&D Regional Project *Estrategias de Protección de la Memoria Material en Paisajes Patrimoniales de Castilla y León: Modelos de Intervención y Redes de Difusión* - VA320U14, and the author Carlos Rodríguez is a FPI-UVa Fellowship under the direction of PhD Darío Álvarez.

### References

- Álvarez, D., 2015. Proyectar lo Intangible. Heterotopías del tiempo en tres Paisajes Patrimoniales. In: L. Franciosini and C. Casadei, eds. *Architettura e Patrimonio: Progettare in un paese antico*. Roma: 2015, 32-43.
- Arribas P., Fernández S., Rodríguez C., Zelli F., 2013. Tiermes Cultural Lab: Excavation, Conservation and Musealization of the Archaeological Site of Tiermes (Soria, Spain). *Procedia Chemistry* 8, 328-36.
- Brown, J., ed., 1984. *Michael Heizer: Sculpture in Reverse*. Los Ángeles: The Museum of Contemporary Art.
- Celant G., 1991. *Michael Heizer*. Milán: Fondazione Prada.
- Treib M., 1987. *The Presence of Absence: Places by Extraction*. *Places* 4, 8-19.